

*If you are using a printed copy of this procedure, and not the on-screen version, then you **MUST** make sure the dates at the bottom of the printed copy and the on-screen version match. The on-screen version of the Collider-Accelerator Department Procedure is the Official Version. Hard copies of all signed, official, C-A Operating Procedures are kept on file in the C-A ESHQ Training Office, Bldg. 911A.*

C-A OPERATIONS PROCEDURES MANUAL

ATTACHMENT

4.56.s SEB C3 Target Primary Cave Sweep Checklist

C-A-OPM Procedures in which this Attachment is used.		
4.56		

Hand Processed Changes

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
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Approved: _____ ***Signature on File*** _____
 Collider-Accelerator Department Chairman Date

P. Ingrassia

4.56.s SEB "C3" TARGET PRIMARY CAVE SWEEP CHECKLIST

Team Leader (TL) _____ Operator 2 (O2) _____

Time: _____ Date: _____

Warning:

If any personnel are encountered during the sweep, **then** they will remain with the sweeper or the sweep shall be aborted. **If** the sweep is aborted **then** the person(s) must be escorted out of the cave by unlocking and opening the "C3" Primary Cave (Downstream) Gate.

Prerequisites

- Two Operators to perform the sweep (both trained as contamination workers)
- Keys BNL15, AA225, 501, M, Yale A43368 and Yale A42562 from North Area key ring
- C-A OPM Att 4.56.s — SEB "C3" TARGET PRIMARY CAVE SWEEP CHECKLIST (2 pages)
- "C" line set to Controlled Access by simultaneous operation of BNL6 keyswitch & MCR_2-1N2 push-button
- TLD Badges and Alarming Self-Reading Dosimeters
- Yale A42562 and A43368 padlocks (one each)
- C3 Target toggle switch is set to CA in Terminal Room 215 Bldg. 911B
- C3 is a Contamination Area – SEE SWEEP RWP for entry requirements
- Flashlight(s) and hand held radio(s)

Initial

- ___1 Sweep Team goes to C3 Target Downstream Gate.
- ___2 TL verifies with CAS Watch that LESB II Separator is off before starting the sweep.
- ___3 TL requests simultaneous release from MCR to enter C3 Target Downstream Gate.
- ___4 Sweep team enters the "C3" Target Downstream Gate.
- ___5 TL closes and resets the gate. Use the BNL15 key in the keyswitch on the 3059 security box.
- ___6 TL observes RESET lamp lights.
- ___7 Sweep Team walks up the labyrinth to the LESBII [separator] gate.
- ___8 TL unlocks (M key) and opens LESBII separator gate.
- ___9 TL enters and sweeps LESBII separator cave while O2 remains outside.
- ___10 TL sweeps out LESBII separator cave closes the door and confirms it is locked.
- ___11 TL radios CAS watch to turn LESBII separator on if the LESBII beam is operational.
- ___12 Sweep team goes under C3 and C1 beam lines and walks to C7 gate on the west side of the C3 enclosure.
- ___13 TL resets C7 gate using the 501 key in the keyswitch on the 5625 box inside the gate
- ___14 TL observes RESET lamp lights.
- ___15 Sweep team sweeps up the labyrinth to the junction of the labyrinth and the C7 beam.
- ___16 TL stands static watch while O2 walks to downstream end of C7 spur.
- ___17 O2 sweeps upstream from the end of the C7 spur and rejoins TL at the labyrinth.

CONTINUED ON REVERSE SIDE

- ___ 18 Sweep team sweeps upstream to C1Q6 on the west (beam left) side of the cave.
- ___ 19 O2 stands static watch while TL walks back to C3 Target Downstream Gate.
- ___ 20 TL confirms C3 Target Downstream Gate is reset.
- ___ 21 TL sweeps up the labyrinth to the junction of the labyrinth and the C3 beam line.
- ___ 22 TL operates and closes C3 target shutter using motor control hung from the wall where the labyrinth meets the C3 line.

Note:

Select open/close with the switch, then press and hold start/stop buttons.

- ___ 23 TL dons contamination protective clothing (booties and gloves) as required.
- ___ 24 TL walks to downstream end of C3 line.
- ___ 25 TL sweeps upstream to the C3 Downstream Target Gate labyrinth.
- ___ 26 TL exits the contamination area.
- ___ 27 TL removes and properly disposes of protective clothing.
- ___ 28 TL operates and opens C3 target shutter using motor control hung from the wall where the labyrinth meets the C3 line.

Note:

Select open/close with the switch, then press and hold start/stop buttons.

- ___ 29 TL sweeps the east side of the cave adjacent to C3P2.
- ___ 30 TL searches behind wire fence (FLASHLIGHT) in dead end upstream of C3D4.
- ___ 31 TL sweeps back to the C3 Downstream Target Gate labyrinth.
- ___ 32 TL sweeps under C3 and C1 beam lines and rejoins O2 at C1Q6.
- ___ 33 Sweep team sweeps upstream.
- ___ 34 Sweep team halts at C3Q4 and TL stands static watch at C3Q4.
- ___ 35 O2, at C3Q4, goes to east (beam right) side of cave and searches upstream.
- ___ 36 O2 returns and rejoins TL at C3Q4.
- ___ 37 Sweep team sweeps upstream to the fence gate at C3D3.
- ___ 38 IF the fence at C3D3 is NOT closed and padlocked (Yale A43368 and Yale A42562), THEN continue with Step 39, or ELSE go to Step 45.
- ___ 39 O2 stands static watch at the fence gate while TL enters high radiation area.
- ___ 40 TL quickly walks to upstream end of the enclosure (C1D3).
- ___ 41 TL sweeps downstream.
- ___ 42 TL looks under and around C1D4.
- ___ 43 TL rejoins O2.
- ___ 44 TL closes and padlocks the fence gate.
- ___ 45 Sweep Team sweeps up and out the C3 Target Upstream Gate Labyrinth.
- ___ 46 Sweep team sweeps through the C3 Target Upstream Gate, closes and resets (BNL 15 key) the gate.
- ___ 47 TL observes yellow RESET lamp light.
- ___ 48 TL verifies with MCR that "C3 Target Primary Cave" U/S and D/S gates are reset for beam by viewing indicators at MCR_2-1N7 and MCR_2-1N8.
- ___ 49 TL files the checklist in the section of FYXX Sweep Log Binder.